THE CLINIQUE.

VOL. VIII.] CHICAGO, AUG. 15, 1887. [No. 8.

Original Lectures.

PROGRESSIVE MUSCULAR ATROPHY.

BY H. B. FELLOWS, M. D., CLINICAL PROFESSOR OF THE DISEASES OF THE NERVOUS SYSTEM, IN THE HAHNEMANN MEDICAL COLLEGE AND HOSPITAL, OF CHICAGO.

Case 15193.—D—— R——, aged twenty-two years, occupation, farmer. About four months ago, following a cold taken from cleaning out a well, a paresis of the right foot and leg first showed itself, and afterward the arm and shoulder of the same side became affected. He cannot flex the foot now, or raise the arm from the side. The grip of the right hand is not more than half that of the left, and that of the left does not appear to be up to the normal standard. The patient thinks his left side about as strong as ever. There is a marked trembling of both hands whenever he attempts any movement of them. His writing shows marked trembling. This trembling has existed for a number of years. He has been "very nervous" since eight or ten years old, for which he could assign no reason. He has never suffered from any acute, severe sickness, appetite good, bowels regular, and the action of the kidneys normal.

There has been, at times, pain in the foot and calf of the leg, such as might come from straining or over using it, but this has at no time been a marked symptom.

No mental symptoms; no nystagmus; pupils normal; no wrist drop. During the last two or three weeks there has, at times, been a slight embarrassment of speech.

Since a fall on the stairs a few weeks ago, the condition of the shoulder has rapidly grown worse.

Inspection shows all the right external scapular muscles in almost a complete state of atrophy, and parts of the trapezius. The deltoid shows only a small farsciculus near its anterior edge, the rest being all in an apparent state of complete atrophy. The muscles of the arm and forearm are lacking in fullness and tone. The flexor muscles of the anterior part of the left leg are atrophied, and those of the calf are evidently going. The left thigh is smaller than the right by three-quarters of an inch. The muscles of both thighs show a quivering from the slightest irritation of the skin, or even from the air. This, at times, appears like a trembling of the limb, and at times, more of a fribillary motion. The same phenomena can be seen in the arms.

The left shoulder is very spare, but not positively atrophied. *Plumb.* 6x four times a day.

You will observe this case did not have any acute beginning. It came on gradually, and has been extending gradually ever since, although not in a uniform way. This, therefore, puts out of our consideration at once acute inflammation or hæmorrhage of any nervous centres. We need, therefore, only engage our attention with the more chronic pathological processes to make our diagnosis. We may at once conclude that some of the degenerative processes are at the bottom of the disease. But before studying the pathological changes, let us fix the anatomical location of the difficulty. The first thing that strikes the attention is the fact that the left side is principally affected but not entirely; evidently the right side is becoming involved; we can not, therefore, locate the point of disease in one of the hemispheres of the brain. Again, this disease has picked out certain muscles and groups of muscles in an irregular way, which is not the manner of any of the hemiplegias of cerebral origin. There is also a lack of other cerebral symptoms and of the special senses, more or less of which are very certain to accompany cerebral mischief. Our conclusion must, therefore, be that the pathological process must have its origin either in the muscles themselves, the nerves that supply them, or in the spinal cord. The positive symptoms which must guide us now are the adult age of the patient, the fact that the weakness of the muscles progressed in proportion to the atrophy, fibrillary movements in the muscles,

and the irregular way in which the muscles have been attacked. The negative ones are the lack of much pain or sensory disturbances such as numbness, or "pins and needles," or hyperæsthesia or anæsthesia in the affected parts. The only pain complained of has been some aching as from fatigue or a strain, and only at times, not often.

Idiopathic muscular atrophy is a disease beginning in childhood, affects more than one member of the family, and involves the facial muscles, especially the zygomatic muscles, which is not the case here.

The sensory irritation, the tenderness in the course of the nerves and muscles, and the anæsthesia which accompany neuritis are lacking. We must therefore conclude that the seat of trouble in this young man is in the spinal cord, and as the ganglion cells in the anterior grey cornua have been proven to control the nutrition of the muscles as well as their action, these must be involved in the degenerative process.

The pathological process has been found post mortem in these cases to involve the anterior horns of the grey matter of the cord and the central column. Ross says: "It seems to me, indeed, that the morbid process begins on each side of the central canal, probably in the tissues immediately adjoining the central artery, and that it extends outward and forward as well as upward and downward from this point as a centre." But at least the ganglion cells of the anterior horns become degenerated. With them go the anterior nerve roots and muscles, all involved in a degenerative process. Other parts of the cord also frequently, if not always, become involved in the degeneration. Gowers says: "In the white columns there is usually considerable, and often almost complete, degeneration of the pyramidal tracts, anterior and lateral." Were the diseased process even a subacute inflammation a paralysis would have preceded the atrophy, but we are assured the weakness and wasting went on together, and we must conclude that if inflammatory at all it must be of a very low type.

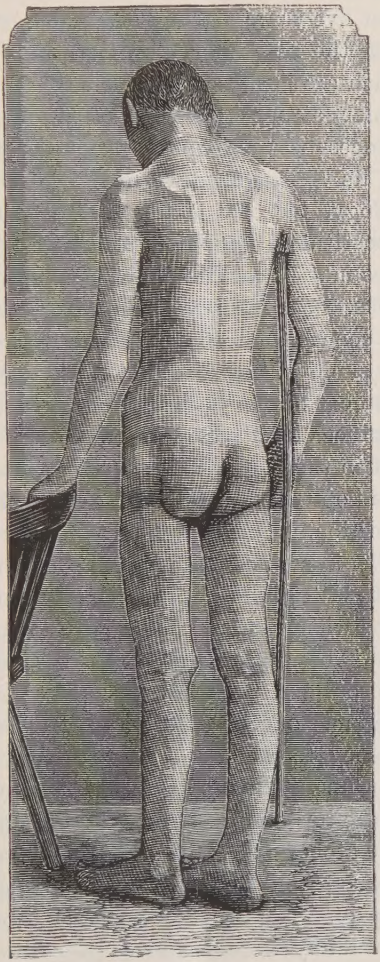
A point that ought not to be overlooked in this case is the trembling on voluntary motion, a fact which you have already ob-

served. This is a prominent symptom of multiple cerebro-spinal sclerosis, and perhaps this was the original nature of the case, and that the sclerosis has more lately involved the anterior or grey horns of the cord, thus adding the muscular atrophy to the other conditions. In the last two or three weeks the patient says he has noticed some little embarrassment of speech, but not of swallowing, a symptom of sclerosis. But I cannot judge positively of these conditions as the answers as to past history are not always as definite as desirable. Such conditions, however, are not impossible.

This case is singular in having the atrophy begin in the lower extremity. In typical cases it more frequently begins in the hand, which is yet tolerably well preserved, though it appears to be going. Less frequently it begins in the shoulder muscles, and still less frequently in the legs. The form of atrophy which seems to prevail in this case is what Gowers term "atonic atrophy." This is well shown by the condition of the calf of the right leg, which has lost its roundness and fullness, and is very flabby to the touch. The right shoulder is not much more than bones and ligaments with the skin drawn over them. The arm and forearm muscles also show the weakness and lack of tone, though most of them are still capable of action. The whole right leg is manifestly atrophying. The right gluteal muscles are also shrunken, as can be seen from the illustration. (The illustration has reversed the sides of the patient.) The paralysis of the case corresponds exactly with the atrophy. He cannot flex his right foot, nor raise the right arm from the shoulder, or put that hand behind him. The grip of the right hand is not over half that of the left. The peculiar way in which the head drops forward shows a weakening of the neck muscles, and is often a feature of this disease.

These cases are usually progressive in their nature, but not always uniformly so. It may begin in muscles of the hand, and years elapse before other muscles show the atrophy. In a few cases it seems to be arrested either by treatment or spontaneously. In this case we find a much more rapid advance, especially in the shoulder muscles, after the fall the

patient had on the stairs. If the cold taken in cleaning the well did not bring on the atrophy, it must have hastened its progress at that time so that it soon attracted the patient's



attention. I do not feel certain that the disease began at that time, notwithstanding wet cold is one of the causes assigned for the disease, for the first time a patient observes

any of the phenonema of such a disorder may only prove that they have advanced to a considerable degree by that time. We had some nervous conditions before this exposure, and evidently weakness with them. The average duration of the disease in about five years. The gravest dangers originate in the affection of the respiratory muscles, and in the bulbar symptoms which are apt to supervene sooner or later. Progressive muscular atrophy does not often affect children; it usually commences between twenty-five and forty-five. Men are more often its victims than women. Heredity plays some roll in its etiology, but this more in the indirect way of a neuropathic constitution than that of direct descent. Among the other causes may be mentioned anxiety and mental worry, wet cold, shocks, both mental and physical, over use of the muscles and concussion of the spine. Sometimes the disease follows syphilis, and no other cause may be traceable.

In the treatment of this class of cases certain general principles must guide. First remove the cause if possible, and put the patient in the best hygienic surroundings that all the nutritive powers of the system may be brought up to their maximum condition. Galvanism and faradism have been tried, and while in some cases good has appeared to result from the use of electricity, in others it has accomplished nothing. It ought, when used, to be applied to both spine and muscles. The two currents may be alternated. Massage may also be used, and certainly its action is in the right direction. Flannels ought to be worn next the skin to counteract its tendency to coldness. Such remedies as Arg nit., Ars., Caust., Cupr., Plumb., and Sul., may be studied. Gowers thinks he has seen good effects from the hypodermic injection of nitrate of strychnia, beginning with a dose of one-eightieth of a grain and gradually increasing it to one-fortieth of a grain. He says: "Strychnia injected beneath the skin has certainly more influence over the disease than when given by mouth." At best you will probably only be able to check the progress of the atrophy, and not to restore the atrophied muscles.

Clinical Society Transactions.

JOSEPH P. COBB, M. D., SECRETARY.

The regular monthly meeting was held in the Grand Pacific Hotel, Saturday evening, August 6, Dr. G. F. Shears, President, in the chair.

Drs. E. Z. Bacon, E. L. Green and W. P. MacCracken were proposed for membership.

Drs. M. E. Avery, O. Poppe, E. Meinhardt, H. V. Halbert, M. Houston, J. E. Morrison and N. C. Kemp were elected to membership.

Dr. Joseph P. Cobb was elected Secretary to fill the vacancy caused by the absence of Dr. A. K. Crawford.

Dr. W. J. Hawkes, Chairman, being off on a holiday, the Bureau of Clinical Medicine failed to report.

VOLUNTEER PAPERS.

I. Stricture of the œsophagus.—By G. F. Shears, M. D.—*Case* 1.—Mrs. M., aged forty-eight, sent to me for diagnosis and advice. She complained of pain and difficulty in swallowing, with a constant feeling of constriction of the chest. The food seems to pass without obstruction to a point about midway to the stomach, when it is arrested in its course, causing much pain and a feeling of impending suffocation. If the food is not readily expelled the suffocated feeling increases, the breathing becomes embarrassed and the patient intensely excited. The difficulty in swallowing is not always uniform. At times the patient can swallow well masticated solids with only a moderate amount of effort, while at other times even fluids are with difficulty passed. She gives the following history: For many years she has been a dyspeptic. About five years ago the change of life commenced, and with its advent the difficulties of digestion increased. About a year and a half ago, while hurriedly eating at a railroad

station, she felt something had lodged in the œsophagus. She drank repeatedly of water, and the offending substance passed down into the stomach, but the oppressed feeling remained for an hour or more. From that time on whenever she was hurried or irritated she was conscious of some pain and a difficulty of swallowing. Although she has exercised more and more care the difficulty of swallowing has increased, until to-day as she takes water she swallows it with great difficulty. Her general health is fair, at least she appears moderately well nourished. A careful examination detects no aneurism, tumor or other disease, that by pressure might account for the difficulty, or might present an obstacle to the use of bougies.

After placing the patient in position a well-oiled, olive-tipped bougie, one-third inch at its greatest diameter, was gently passed into the œsophagus. No obstruction was met until the bougie had passed about ten inches, when a slight obstruction presented. Moderate pressure overcame the resistance, and the bougie passed readily into the stomach. Its removal was effected without discomfort, except the production of vomiting. After removal the patient was handed a glass of water, and drank with much more ease. The examination was repeated with a one-half inch bougie, and less difficulty was experienced than at the first trial. This confirmed the suspicion I had entertained, after hearing the patient's history, that the case was one of spasmodic or hysterical stricture.

The patient was much better immediately after the use of the bougie, and swallowed dry bread well masticated with ease. The use of the large bougie once a week was recommended, and the patient advised to take *Sulph.* and follow, if necessary, with *Nux Vomica.*

Case 2.—Mr. B. was sent to me by Dr. Stiles. About three months ago he noticed the first deviation from his usual health. After eating some sauce which was rather acid he felt a pain in his chest and some discomfort in his stomach. The meal was eventually rejected. He believed the result to be due to the slightly fermented condition of the fruit, and abstained carefully from similar food. Nevertheless the vomiting would occasionally occur, always preceded by the pain in the chest. In a short time he began to experience some difficulty in swallowing solids. This condition has gradually in-

creased until there is an utter inability to swallow solid foods, the patient subsisting entirely upon milk, beef tea and soups. Any little particle in his soup may cause him much trouble. To-day at his dinner a small piece of vegetable was swallowed, unnoticed. It became fixed in the tube, and prevented even the swallowing of liquids until the effort produced resulted in emesis and the expulsion of the intruder. Even when no solid food is taken the patient vomits frequently, the milk ofttimes being ejected as soon as taken and without any change in its character. He is constantly hungry, is losing flesh, and has a pale, sallow color. The pain, which is intermittent, is not pronounced. It darts about in different directions, sometimes toward the head and fauces, sometimes toward the back.

A two-eighths inch bougie was introduced into the œsophagus and passed about twelve inches when it met with a pronounced obstruction which could not be overcome. The patient said he felt the same sensation which he experienced when another surgeon had passed the bougie, and declared it had entered the stomach. I could not agree with his former adviser, and concurred in Dr. Stiles' diagnosis of organic stricture due to *carcinoma* of the lower portion of the œsophagus. The patient was advised that it was unwise to use instruments for dilation as long as he could take liquid nourishment, for fear of perforation and *Conium* 3x was prescribed. This remedy, I believe, the patient did not take as he preferred to follow the directions of the more sanguine or ignorant practioners, who believed the stricture to be spasmodic. He died eight months later. No post-mortem examination was made, but the disease was undoubtedly *carcinoma.*

Case 3.—Mrs. B. aged fifty-three. For two days she had been unable to swallow even fluids. After a few minutes' stay in the œsophagus water would be regurgitated. She is a small, dried-up specimen of a German, with a grey cadaverous countenance, and very weak. Some thirteen months ago she first noticed the difficulty of swallowing dry foods, especially dry crusts, but had supposed it due to the imperfect mastication of the food, her teeth being poor. The difficulty gradually increased until about two months ago, when she was obliged to restrict herself to liquid foods. For the last two weeks even liquids have been taken with great difficulty. On two occasions she has gone twenty-

four hours without being able to take food into her stomach, but at the end of that time, after straining and vomiting of mucus, deglutition became possible. This attack has now persisted for forty-eight hours, and she desires relief.

The pencil point bougie was introduced, and passed readily until it reached the lower third of the œsophagus, when it met with a firm obstruction. After considerable pressure it passed through the stricture and into the stomach. During its passage the sensation conveyed to the finger was that of passing through partially decomposed tissue. On the removal of the bougie the patient vomited blood and shreds of membrane. A somewhat larger tube was then introduced with the same result. This was followed by a small sized stomach tube, through which nutriment in the form of Cybil's beef extract was injected. I did not see the patient again, but was informed that the stomach tube was used for about a month, at the expiration of which time the patient died.

The cases above reported represent two of the three forms of stricture of the œsophagus—the hysterical or spasmodic and the malignant or carcinomatous. The hysterical or spasmodic is usually met with in hysterical women during the period of menstrual activity or at the occurrence of the menopause. The subject may be able, as in the case related, to give an exact date as to the time of the first appearance of trouble, and to give a history of injury as the exciting cause, but in many instances the difficulty has come on so gradually that the patient is hardly aware of its commencement. This form may be suspected when the patient is neurotic, and, when, instead of being emaciated, the patient is well nourished. This is especially true if the disease has existed any great length of time.

Additional probability is given to the diagnosis if the inability to swallow is intermittent, and if the constant craving for food, which is so common a symptom in organic stricture, is absent. Finally the ability to pass a full-sized bougie makes the probability almost a certainty. Treatment consists in the passage of bougies from time to time, and by the administration of such remedies as are indicated by the general symptoms.

The malignant stricture is usually epitheliomatous and may occupy any portion of the canal. By some observers the disease is said to be most common just behind the larynx, but I have found it more frequently in the lower portion of the tube. The early symptoms are in most instances similar to those given in the second case reported. As the disease progresses the difficulty in swallowing becomes more pronounced until, as in the third case reported, it becomes impossible. Pain is usually constant, and of a sharp lancinating character, darting about in different directions—up into the pharynx, back toward the spine or down into the abdomen. Occasionally it is almost entirely absent. In the later stages of the disease the countenance exhibits the peculiar appearance so indicative of malignant troubles. Death may take place from inanition, from hemorrhage resulting from the extension of the ulceration to some large vessel, or from the escape of the ingesta into the wind-pipe or pleural cavity. Malignant stricture may be suspected, when the patient is over forty years of age, when the difficulty of swallowing is continuous, when there is progressive emaciation, and when the history of the case precludes the possibility of hysterical stricture or of simple cicatrization from mechanical or chemical injury. If by the use of the bougie a permanent obstruction is met, and if on withdrawal of the instrument shreds of the neoplasm are brought with it the diagnosis becomes positive.

The treatment of malignant stricture is merely palliative, and as long as the patient is able to swallow plenty of liquid nourishment no instrumental interference is justifiable. When this becomes impossible a tube may be introduced and feeding continued. If the calibre of the œsophagus is rapidly diminishing, and the surgeon fears that if the tube is frequently withdrawn he may not be able to introduce it, the tube may be allowed to remain. If the stomach objects to its presence, the plan recommended by Mr. Charters Symonds may be tried. A gum elastic tube with a funnel-shaped upper expansion is passed through the stricture, the expanded portion resting upon the stricture and preventing the tube from passing into the stomach. The tube is introduced by a conical shaped bougie

A silk thread is placed through the side of the tube and brought out of the mouth, by means of which the tube may be withdrawn if necessary. The stricture is thus kept from closing, a passage is left for food, and at the same time there is no tube in the mouth or stomach to cause irritation. The plan, so far as I know, has not been extensively tried, but the success of intubation of the larynx and the well known tolerance of the œsophagus to foreign bodies makes me look upon it as a favorable one.

When the calibre of the œsophagus is obliterated, and a bougie can not be passed or nourishment can not enter the stomach, the surgeon must adopt one of two measures, either maintain life by rectal alimentation or make some operation by which the stomach may be entered. Four operations have been practised in the treatment of cancer of the œsophagus: gastrostomy, œsophagostomy, internal œsophagotomy and œsophagectomy. The benefit to be derived from operative procedures may be judged by the following statistics condensed from the admirable paper read by Samuel W. Gross before the American Surgical Association:

Gastrostomy consists in the formation of a permanent gastric fistula. The operation has been made 167 times with 49 deaths as the direct or indirect result of the operation. Of the entire number, 117 died within one month, 46 survived longer than one month and four were living, how long could not be determined. The average duration of life was 33 days. Œsophagostomy consists in the establishment of a permanent fistula in the neck, and is only applicable when the stricture is above the lower third of the tube. It has been made 21 times. Of these, four recovered and 17 died. Of the four recoveries one lived two months, one five months and one 16 months. Excluding the latter case, in which the diagnosis was doubtful, the average duration of life was 29 days. Internal œsophagotomy is not often indicated in cancer of the œsophagus, and was resorted to once, the patient surviving six months. Œsophagectomy consists in the resection of a portion of the œsophagus, and has been resorted to five times. Of these one died in twenty-four hours, one on the seventh day, one

in the sixth week, one was doing well at the expiration of seven weeks, and another at the end of five months. The common location of the carcinoma makes the operation possible in a very limited number of cases. A review of these statistics shows an average duration of life after these operations of from 29 to 33 days. When the inconvenience, the distress and the expense to which the patient is subjected for the short increase of life is considered, the gain seems to be dearly bought. When we consider, also, that during a portion of this time, if not during the whole, life might have been maintained by rectal alimentation one can not but feel that the patient should have the privilege of dying without interference.

Discussion.—Dr. Leavitt—I recall a case where a lady not only herself believed that she was suffering with stricture of the œsophagus, but also succeeded in convincing her friends that such was the case. After some preliminary examination I passed, without any difficulty, a one-half inch probang through the œsophagus and into the stomach, thus settling beyond any doubt the nature of the difficulty.

Another case of quite a different character came under my care. A gentleman from out of town came for treatment; he visited Dr. Johnson, who, after due examination told him that there was a stricture of the œsophagus, due to a cancerous growth, also that little could be done for his relief. He consulted me. Recognizing the nature of the case I gave him little encouragement; however, he remained under my care four or five weeks. He steadily declined, and against my advice went home while too weak to travel. I have since heard that he died there a day or two after his arrival.

Dr. W. S. Gee—One class of strictures not mentioned in the paper are those caused by swallowing caustics where often a bougie cannot be passed. In other cases I should like to emphasize the use of *Lachesis* as the remedy which has most often been found to give relief, though, of course, the history may point to the constitutional and therefore deeper and more lasting remedy.

Dr. W. E. Reed—I remember a case in which the attending physician was the only person who could induce the patient to eat. He really sat beside the patient and fed her. The family were not satisfied with her progress, and tried all the doctors in the place, nine or ten in number. She finally died while under the care of a traveling doctor, who comforted the family by assuring them that probably nothing had entered her stomach for two years or more.

Dr. H. B. Fellows—A full dose of apomorphine might be of service for diagnostic purposes.

Dr. J. D. Craig asked for light on the use of electricity in strictures of the uterine cervix. (A member suggested that the cervix did not lie within the œsophageal tract.)

Dr. R. Ludlam—The hysterical form of œsophageal spasm has more often come under my observation than either of the others, and I am inclined to think that its origin is due to mental shock or strain, followed by the desire to die, and the consequent determination not to take food. This resolution soon develops the idea that it is impossible to swallow, and hence an acquired intolerance in the œsophagus of even the smallest particles of solid food. In other cases the nervous patient is fully possessed of the notion that should she attempt to swallow she would certainly choke to death. In one case this condition was incident to Bright's disease, and the patient had frequent relapses that were very distressing. Usually it is a self-limited and not a very serious affair, finally passing off like other forms of hysteria without sequelæ.

Dr. Shears—In closing the discussion Dr. Shears said: It was not my intention in the paper read to discuss all the forms of stricture of the œsophagus, but only such forms as were represented by the cases reported. All consideration of cicatricial stricture, the result of mechanical or chemical injury, was therefore omitted. This latter division includes a very interesting class of cases, and was quite exhaustively considered in this society several years ago by my colleague, Dr. Hall, at which time he exhibited a young man with a stricture of this character so pronounced that only liquid food could be

taken, and even this with great difficulty. The case was successfully treated by dilation. The operations enumerated as applicable to malignant stricture may also be demanded in cicatricial stricture when dilatation or electrolosis affords no relief. Recently Prof. Loretta, of Bologna, introduced a new operation for the treatment of impermeable strictures in the vicinity of the stomach, which is intended to replace pylorectomy for simple narrowing of the pylorus or gastrostomy for simple strictures of the œsophagus. The patient was a man twenty-four years of age, and suffering from a stricture of the lower third of the tube. Loretta opened the stomach, passed a divulsar through the cardia into the stricture, and ruptured it sufficiently to admit the passage of food. The wound in the stomach and the external wound were closed with sutures, the patient doing well. The cases are too few and the operations too recent to determine the value of this proceeding.

II. Gall-stone colic; a case for diagnosis.—Dr. J. M. Lyons, of Pullman, presented a patient of whom she gave the following verbal history: *Case.*—Mrs. ———, thirty years of age, has been ill for a year and a half. Her trouble dates back to confinement. She has attacks of very severe pain in the right hypochondriac region, which come on suddenly, and are agonizing while they last. These paroxysms are attended with great dyspnœa, chilliness and vomiting, the latter gives some relief, after which the pain wears away slowly. A slight jaundice often follows, although the sclera remain white. She has no headache, and no unusual odor of the fæces, or other ejecta. The urine is high colored. A slight itching of the skin is always present.

The treatment has consisted in the use of *Chelidonium* and *Lycopodium*, which up to the last attack have given relief. During the last attack they failed utterly, and chloroform also failed to give relief. A pint of sweet oil and twelve grains of popophyllin, in divided doses was finally given. She vomited once, and in the ejecta were several soft white substances, much of the shape and consistence of large kidney beans, and fully an inch long. The same kind of bodies were found in the fæces later.

Dr. Ludlam expressed the conviction that the case was one in which the symptoms were due to the passage of biliary cal-

culi, and that this diagnosis was confirmed by the atrocious character of the pain and by the presence of the bean-like bodies in the stools. These bodies had often been recognized after a patient who had suffered from gall stones had taken a large quantity of olive oil. This form of biliary disturbance is not infrequently post-puerperal.

Dr. W. S. Gee—The patient presented by Dr. Lyons suffers from a distressing condition, which it is our misfortune to meet too frequently. Whether the "biliary calculi" constitute the whole trouble is a matter which should be decided after a most careful examination. Other disturbances in that locality give at times rise to similar suffering, and to determine the presence or absence of a coexisting malignant trouble is of importance. The absence of headache, and of the usual signs of the "bilious attacks," is notable in this case, and leads us to infer that her history previous to the first appearance of this difficulty would aid in the constitutional treatment. The management of the attack is of interest, and in the few cases which have come under my care I must say that remedies have aided more than the usual expedients.

The pain, of course, arises from the unusual distension of the duct, but with it there is a spasmodic action which may be overcome by addressing our remedies to the nervous system as we would in a case of childbirth or colic. The relief of the patient is the end sought, and although the cause may disappear suddenly with the passage of the stone we have a right to claim the relief as due to our remedy, if that amelioration came within a short time after its administration. Ether or chloroform may relieve in a *general way*, but relief of the part affected is more desirable if by specific prescribing we may obtain that result.

In one case *Chamomilla* gave quick relief, when the griping, tearing pains extending over other portions of the abdomen were present and the mental symptoms of this remedy were prominent. The relief, of course, is by the relaxation of the spasm which holds or prevents the stone from passing through the duct. *Calc. carb.* has relieved such cases when the general and local symptoms indicated it.

Berberis Vulg. is a remedy of great value, and one frequently indicated. The pains are of the pressing, burning, tearing character, and the kidneys are involved with the slimy, dark urine, with heavy sediment, with pain also in the back and hips.

Dioscorea Vil. is a remedy to be studied, especially when the pains are *cutting*, changing location and *radiating*. Much flatulency usually attends when *Diosc.* is the remedy.

A few years ago Dr. Goss called attention to *Chionanthus Virginica* as a drug having a special action upon the liver. It possesses the power of producing the typical bilious sick-headache and jaundice. Dr. Hale experimented upon himself, even producing the vomiting, the jaundice and the headache. Dr. Goss said he had used the *Chionanthus* in a great many cases of jaundice, even "of years' standing, removing it in eight to ten days." Also in gallstone obstruction it has acted very quickly. The pathogenesis bears a closer similarity to this trouble than does that of *Chelid. maj.* or *China*, and the effects have reached farther than present relief. My experience with it has been with the mother tincture and third dilution. The removal of the cause is our first aim, and in the complete photograph of the case we may see the remedy covering the *local* as well as the *general symptoms*.

Dr. Barker recalled Dr. A. E. Small's remedy of a half pint of sweet oil.

Dr. Davidson—Some patients have a difficulty in swallowing so much oil, and some positively refuse to take it.

Dr. Joseph P. Cobb—Sweet oil may be administered without any difficulty by disguising its taste. Instruct the patient to fill the mouth with lemon juice; moisten the glass with port wine, allowing a little to remain in the glass, then swallow the oil quickly, and immediately after suck the lemon again. It will not only go down without any taste, but there is also little liability of its coming up again.

Dr. Shears—A lady under my care found, after several attacks, that she was more comfortable while taking oil and passing stones, and has formed the habit of taking oil three

times daily. In this case, during the most severe attacks, her temperature has gone as high as 104°. I would like to ask if that is usual.

Dr. H. B. Fellows—To my mind it is foolish to temporize with slow-acting remedies. In such a case the pain *is* atrocious, and must be controlled. The calculi may become lodged, and something powerful is needed to move them on. We must bear in mind that fatal collapse may ensue. Ether, by inhalation, administered to the surgical degree, is often called for. I have combined ether with sweet oil to an advantage; the ether relaxes the muscular spasm which usually accompanies the passage of large calculi. The pain usually ceases suddenly with the advent of the calculus into the bowel, and my experience would show that the temperature is more apt to be depressed than elevated.

III. A case of placenta-prævia, with remarks on the tampon.—Sheldon Leavitt, M. D.—The case briefly detailed below is not wholly devoid of interest or instruction, and therefore, not altogether unworthy of report to this clinical society; but it does not possess features which cause it to stand out very prominently among the numerous cases that come under the care of an active obstetric practitioner. On its merits alone I would not venture to recite it here; but I bring it to your notice as a text for a few practical observations.

Case.—At about midday of May 23, last, Dr. Cora E. Taylor, a most excellent and successful practitioner of Englewood, telephoned that she had under her care what seemed to be a case of placenta-prævia, in the management of which she might desire my assistance. I promised to hold myself in readiness to respond at a moment's notice, but heard nothing further till about 10:30, P. M., at which time the patient's husband requested my immediate presence. I reached the house about forty minutes later, and found that the patient was one whom I had delivered about five years before, this being her second pregnancy. Dr. Taylor explained that the first hemorrhage was suffered at the third month of pregnancy, the second at the fifth month, the third at the seventh month and the fourth that very morning. No

pains had been felt until a few hours before my final call. In the evening the flow suddenly became alarmingly profuse, and was checked only by the tampon, which, when I arrived was still *in situ*. The membranes ruptured early in the evening, but discharge of the liquor-amnii did not arrest the flow. The tampon used was a small roll of raw cotton, tied in several places with an unbroken string. It had been dipped in an antiseptic and astringent solution before introduction, and, when in place, filled the vagina to the vulva. In spite of this we found on examination that there was considerable flow, certainly enough to greatly reduce the patient in a period of two or three hours. The last severe hemorrhage caused a rapid and almost imperceptible pulse, but, by the time I arrived, the pulsations had diminished in frequency and increased in force. After deliberate reflection and discussion, it was thought best to put the patient under an anæsthetic, remove the tampon and effect delivery.

At that time the pains were regular and moderately severe, the os was supposed to be about as large as a silver dollar, but dilatable, and the woman's courage was good. When ether anæsthesia had been effected, we found that the tampon had been forced entirely out of the vagina, and the flow was again profuse. Hastily we drew the patient to the edge of the bed, and placed the forceps within reach. On examining I found the os about as it was supposed to be and the placenta-prævia but partial, the vertex of the fœtus being reached by passing the finger to one side. The forceps were put on, but, as they did not hold well, and the hemorrage was alarming, they were hastily withdrawn. The back of the child having previously been found on the mother's left side, the left hand was at once passed into the uterine cavity. For a few seconds the hemorrhage was terrific, the blood spurting out by the side of my forearm in streams; but the right foot of the fœtus was drawn down, and, by the aid of Dr. Taylor's hands externally, version was rapidly effected. A living, but temporarily asphyxiated child soon cleared the vulva. The placenta was delivered in due time, and the patient, I understand, has made a good recovery.

The subject of the vaginal tampon merits thorough consideration, but at this time we will restrict our view of it to the question of material for an effectual tampon and the mode of introduction.

Various substances have been recommended, and doubtless all of them, in experienced and skillful hands, have proved

adequate. The fact is that the method is here of far greater moment than the material. Strips of soft linen, of silk or even muslin, small sponges, pledgets of cotton and rolls of cotton are all good. But whatever the material it should be used with due regard to the dangers of infection and of persistent hemorrhage. This implies that we should be careful to use aseptic tampons. If convenient they ought to be wet with an antiseptic fluid; but, whether this be done or not, cleanliness is essential. Soiled fabrics, cotton which has been lying in an unclean room, and toilet sponges ought not to be permitted to come in contact with the sensitive and perhaps abraided mucous surface within the vagina, much less to remain in close relation to them for hours.

Without attempting to discuss the question of what constitutes a demand for the tampon, I may be permitted to say that I have seen very few cases which, in my judgment, presented symptoms calling loudly for it. I have seen cases, unlike that before recited, where the tampon was used unnecessarily, and, in most instances, ineffectually.

If we resort to this expedient at all let us do so in a manner which will insure complete arrest of the dangerous hemorrhage. I am not partial to sponges, but if torn into small pieces they answer every purpose. Strips of soft linen, muslin or silk do very well, best of all is raw cotton, or cotton batting, as it is called. Absorbent cotton is not as suitable. Astringents are not necessary, and are to be avoided, save for the part which comes in direct contact with the os uteri. For that perchloride of iron or a solution of alum may be used. A piece of alum can be placed within the os and held in place by the packing.

Put the woman into the Sims position, and retract the perineum with Sims' speculum or the fingers of the left hand. Failing to do this we inflict great suffering on the woman by the vulvar and vaginal friction. Smear the packing material with vaseline to facilitate introduction, and begin by filling the vaginal fornix close in about the os uteri, and finally cover it. If raw cotton or fragments of sponge are used each piece which goes high in the vagina ought, for ease of

removal, to be circled with a string which is left to trail from the vulva. The vagina is thus packed full, and the T bandage, tightly applied, completes the operation. In tamponing the vagina with cotton so as effectually to seal it, as much as a pound of material may be consumed. Let the work be deliberately done, since here, as elsewhere, "haste makes waste." Tampons introduced hurriedly and without regard to details, are often worse than useless, and are always unworthy the reliance of a careful and intelligent obstetric physician.

So thoroughly ought the operation to be performed that the vulvar portion of the tampon shall remain uncolored by the flow. Oozing sufficient to wet the cotton there constitutes an indication for removal and reapplication.

In conclusion I may be permitted to summarize: The tampon is not often indicated, and ought to be used only when measures for immediate delivery can not, with comparative safety, be adopted. But when called for it should be introduced with the greatest care so as effectually to seal the vagina and positively arrest the flow.

IV. Notes on the clinical significance of profuse urination.—By C. E. Laning, M. D.—It is not my intention to discuss the significance of an increased secretion of urine in all cases in which it may occur, but rather to study it in connection with one or two lesions which are not generally considered.

The conditions which most frequently give rise to excessive urination are the following: diabetes insipides and diabetes mellitus, hysteria, the waxy kidney and the granular kidney. A word in regard to differential diagnosis in the above diseases and we will pass to some other conditions which may and do give rise to an increased secretion of urine, and which are sometimes mistaken for other and graver lesions.

In the case of hysteria the increased flow bears a certain relation to the paroxysm; it does not continue for any length of time after the attack has subsided, and, moreover, there are in connection with the urinary symptoms unmistakable evidences of hysteria. Sometimes, it is true, the disease assumes

such forms as to mislead any but the most cautious and expert. In diabetes the sugar in the urine is a cardinal symptom. In polyuria there is entire absence of sugar or albumin, while in waxy kidney there is more or less albumin almost constantly present. In granular kidney a variable amount of albumin can be detected as well as a decided increase in the arterial tension.

That at least three grave diseases have, as a characteristic symptom, increased urination in their earlier stages, makes it imperative that the physician should be able at once, or at least, at the earliest possible moment to assign the proper cause for such symptom.

I have at different times had cases which had been treated for various urinary affections, including the ones above mentioned, and which, under such treatment, neither developed the disease they were supposed to have, nor recovered from the one which they had. I have had patients come to me who had been told that they had diabetes mellitus or insipius, the only evidence of either being a constantly increased flow of urine.

Within the brain are at least two centres, which may, as the result of functional or organic disease, most frequently functional fortunately, give rise to polyuria. One of these centres is located in the *tubercula quadrigemina*, the other near the posterior-median portion of the floor of the fourth ventricle.

Careful physiologico-pathological studies demonstrate beyond doubt that the *tubercula quadrigemina* contain within their structure *the*, or at least *one* of the most important emotional centres. There can be little doubt that *gelsemium*, through its action upon this centre produces many of its symptoms, particularly those of an emotional character. When this centre is affected in such a manner as to cause polyuria, the disease, as a rule, is more difficult to cure than when the lesion is in the fourth ventricle, though if not cured, its final results are not so likely to be serious in character. This is principally for the reason that the centre in the ventricle is contiguous to those which, when involved, give rise to albuminuria and diabetes mellitus.

When the *quadrigemina* are affected the amount of urine voided is increased by any emotion, whether pleasant or the reverse. Business worry in men has a decided effect, and even household affairs, if taxing or annoying, affect women in a similar manner. Such patients are usually easily fatigued, and comparatively slight exertion causes more or less palpitation of the heart. They are depressed, moody and desirous of some pleasurable excitement, during which they feel perfectly well, although the amount of urine is invariably increased.

In the majority of such cases the thirst is not increased materially, at least in due proportion to the increased quantity of water passed from the system, many of them being indeed almost thirstless. If this group of symptoms is found in a patient, almost to a certainty the lesion may be located in the *corpora quadrigemina*, and the remedy will be *Gelsemium*.

Certain complications may arise which make the case assume a somewhat different aspect and which require different treatment. Thus some of these patients are troubled seriously with great dryness of the lips, tongue, and indeed the entire buccal cavity. In some instances this is so great that the patient can hardly articulate until the mouth and throat have been moistened with water. To comprehend this phase of the disease we must become familiar with the mechanism by which the secretions are normally poured out on the surfaces affected.

The secretion of saliva is purely a reflex act, and while the will has no power directly to augment or diminish the amount secreted, it can, by calling upon the imagination, effect very decidedly the function of the salivary glands. Certain emotions, or forms of nervousness as they are sometimes called, cause a greatly increased flow, or inhibit it almost entirely. The emotional centre which produces this effect may be either stimulated as a result of impressions made upon the mind from the external world or as a result of certain pathological changes within the centre itself. This is analogous to the production of emesis by, on the one hand, an actual lesion of the stomach or brain, or, on the other, through the effect of imagination.

While therefore the reflex centre for the excitation of the salivary and buccal glands lies in the cervical medulla, it is connected sympathetically with the *corpora quadrigemina*, therefore certain functional lesions may so affect the reflex centre of salivation, which is as has been stated in the cervical medulla, in such a way as to increase or inhibit glandular action.

Where the *corpora* are involved in such a manner as to produce profuse urination, accompanied with great dryness of the lips, tongue, buccal cavity and throat together with much thirst, in the majority of cases, *Natrum muriaticum* is the remedy.

I have cured two cases of polyuria with *Codeia* 3x, in which the following symptoms were present: Much dryness of the mouth and throat, with a slightly bitter taste, and notwithstanding the parched condition of mouth and throat there was no thirst, in one case almost an aversion to water; the patient, a lady, would for the purpose of moistening the mucous surfaces take a swallow of water in her mouth, but almost immediately eject it as being distasteful. In addition to these symptoms in both patients there was present a symptom which I consider to be highly characteristic of *Codeia*, viz.: Inability to sleep, yet lying quietly and restfully all night, indeed patients will have more or less pleasant fancies, or dreams as they might be called, only for the fact that they are entirely conscious of their surroundings, and know that the pleasant visions and sensations which they experience are due to a disordered imagination, and are not, strictly speaking, dreams, the outgrowth of imperfect sleep. Although such patients do not really lose consciousness during the night, they nevertheless feel rested and refreshed in the morning.

Ignatia is at times indicated when the *quadrigeminal* bodies have become so affected as to cause irritation of the fibres from the superior division of the olivary fasciculus, which is thus transmitted to the phrenics, and hence produces the irregular spasmodic contractions of the diaphragm, which in turn give rise to involuntary sighings. Other symptoms indicative of a lesion of the *copora quadrigemina* will, of

course, be present to aid in and confirm the selection of the remedy.

Phosphoric acid is occasionally indicated in lesions of the ganglia under discussion, but more frequently where the derangement affects the centre of polyuria, which is located in the medulla, or the centre below it, the true cerebral diabetic center.

As has already been stated, lesions of the centre in the medulla are of a more serious nature than similar ones of the basil ganglion referred to, because of the proximity to the diabetic center which by extension of the difficulty is liable to become involved.

For a clear understanding of the manner in which polyuria or diabetes is produced, as a result of lesions of the three centres mentioned, I will say that all of them are simply vaso-motor centres. If this be true, how does irritation of two of them cause only an excessive secretion of urine containing no sugar, while the third, lying close to the second, not only increases the urine but causes sugar to appear in it. The centres in the quadrigemina and the upper one in the floor of the fourth ventricle are connected with the kidneys through the sympathetic byway of the renal splanchnics from the twelfth dorsal ganglia, and in this way affect the circulation of the kidneys and of the kidneys only. In the case of the diabetic centre in the medulla, which lies a short distance from the polyuria centre, the vaso-motor nerves have their origin, which control not only the renal circulation but that of the entire chylopoietic viscera. How does this give rise to sugar in the urine? It may not be absolutely necessary for the full understanding of the subject to go outside of the body, but by being familiar with the entire cycle of changes which take place from the formation of starch by the plant up to the appearance of sugar in the urine I always feel myself to be more the master of the situation. Briefly, then, plants or vegetables by absorbing CO^2 and H^2O carbonic acid gas and water respectively, finally unite the molecules of these substances in such a manner as to produce $C^6 H^{10} O^5$, starch. This introduced into the organism, through the action of the ptyaline

and pancreatin, takes on one molecule of water H^2O, which changes the formula to $C^6H^{12}O^6$, or glucose. This is now taken up by the capillaries, which unite to form the veins, which in turn form the portal, hence it is carried directly to the liver. Such glucose as is demanded by the system in general passes on through the liver into the hepatic veins, from thence to the inferior cava and heart, from here into the pulmonary artery, and thence through the pulmonary veins to the left auricle, then to the ventricle, then to the aorta and into the systemic circulation, where we will leave it for the present. Now taking it for granted that just enough sugar has passed through these channels to supply the systemic demand, a certain quantity of it will be oxydized in the lungs and converted into CO^2 and H^2O, the original substances from which the plant manufactured the starch. The remaining portion passes to the various cells demanding it. If after the ingestion of a meal consisting largely of starch all the sugar formed from it should pass directly into the system by the route already described, the lungs could oxydize only a certain proportion of it, the various cells of the body could appropriate only so much of it, and as a necessity an excess would remain in the blood. An excess of any of the constituents of the blood stimulates nature to throw them off, excrete them by the proper emunctories, which in the case of sugar are the kidneys. One more step and I think the manner in which diabetes is produced by a lesion of the medullary centre will be plain. In order that the sugar or sugar-forming foods ingested at a given meal do not pass too rapidly into the circulation the liver has the power of storing up a certain amount of it, not in the form of a glucose, but, by taking one molecule of water from it, changes the formula once more to that of $C^6H^{10}O^5$, not starch in this instance but glycogen, a sugar isomeric with starch. When glucose is needed, the glycogen is reconverted into that substance and sent the round of the circulation. As the glucose passes into the liver a certain time is required for the hepatic cells to convert it into glycogen. Now, if the so-called diabetic centre in the medulla is irritated it accelerates the circulation so through the liver that the

greater amount of glucose passes through unchanged, and hence a greater or less per cent passes out through the kidneys.

This may seem like an unnecessary amount of detail by way of explanation, and it is not intended for the wise ones, but for students and young practitioners. This also accounts for the fact that when sugar appears in the urine in cases of pneumonia or pleurisy, where there is much effusion, the amount of sugar which should be oxydized by the lungs, of necessity can not be and hence the result referred to.

My observation leads me to believe that when polyuria is due to a lesion in the medulla, the patient is more apt to be disturbed at night, through a desire to urinate than when the cause of the affection lies in the quadrigeminal bodies. I think this is because the lower centre is more purely automatic than the other, and does not rest functionally at night to the same degree that the higher one does. Another point of differentiation, and going also to confirm the theory just advanced, is, that the flow is not so likely to be paroxysmal or intermittent in character when due to irritation in the medulla as when in the ganglia above. When the upper centre is involved as has been stated, any excitement or exhaustion almost invariably greatly increases the flow of urine, whereas the opposite condition, a state of quietude of both mind and body, acts in the reverse way. This is not true in the other case, or at least only to a limited degree. Regarding the nightly aggravation I have noticed this exception to the rule above given, viz.: That if the patients have been worried or excited during the day, they will be obliged to rise, in some cases, as often as fifteen or twenty times in the night, far more often than in the medullary affection, in which case three or four times is the usual limit. Thus the quadrigeminal lesion causes, as the case may be, either decidedly more or less disturbance than that in the ventricle.

The remedies I have found most useful in polyuria due to the ventricular lesion are *Phosphoric acid*, *Lactuca virosa* and *secale cornutum*.

Hospital Notes.

THE WOMEN'S CLINIC.

SERVICE OF PROF. LUDLAM.

OVER-LACTATION; RAPID CHILDBEARING AND THE TUBERCULOUS DIATHESIS.—*Case* 20060.—This poor woman's clinical history is suggestive. She has been married thirteen years, during which time she has had six children, each of which she has nursed for nine or more months, and during lactation her menses have always been regular, so that, for the thirteen years, she has either carried a fœtus in utero or a child at the breast constantly, and, excepting in pregnancy, has menstruated all the while. Is it any wonder that she complains of exhaustion and debility, and that she is a maternal wreck?

It was formerly held that pregnancy put a stay upon the development of tuberculosis, and under that theory thousands of children, who were doomed to die of phthisis, were born into the world merely to patch out the mother's frail tenure of life. Now we know that the tuberculous diathesis constitutes a sort of predisposition to rapid childbearing, and that, unless it is guarded or held in check, this tendency will involve whole families in a common ruin. Along with this extraordinary gift of procreation (which Nature sometimes suspends by amenorrhœa from genital phthisis or in some other way) there is in this class of subjects a remarkable ability in the way of furnishing food for the offspring. Many a consumptive mother "runs to milk," and will not believe that a function which is so free and spontaneous can possibly exhaust her own vitality.

Besides all this, and as if it were meant that such a mother should wear out as speedily as possible, many, and indeed the most of them, are likely to menstruate while they are suckling their young. Not a few of them have menorrhagia, but others

menstruate normally with respect to the regularity and the quantity of the flow. In either case it is an added drain, which even the strongest organization could not withstand. And I warn you, therefore, to be on the lookout for these peculiar concomitants in all of your middle-aged lady patients who are predisposed to phthisis.

POST-HÆMORRHAGIC ANÆMIA.—*Case* 17738.—Anæmia is sometimes the cause but more often the consequence of excessive menstruation. Losing sight of this fact, physicians are very apt to conclude that when a case of menorrhagia has been brought under control and the hæmorrhage arrested the cure is complete. But the ill health that follows, in chronic cases especially, is proof to the contrary; for the post-hæmorrhagic condition that persists needs treatment and should not be neglected.

Whatever ideas we may hold concerning the proper treatment of anæmia in general, the form of the affection that occurs in women who menstruate too freely and too frequently requires, I believe, special care. Besides the usual directions as to diet, fresh air and exercise, I always insist that these patients shall observe a strict menstrual quarantine; for if they are allowed to run about during the period, the result will be to increase the pelvic congestion and its consequent mischief, even if it does not cause a return of the hæmorrhage. The remedy that I have found most useful for this particular form of anæmia is the *Ferrum Cit. et Strychnia* in the third decimal trituration. It may be useful in other varieties of anæmia, but in this form of the affection, where there is no cancerous cachexia, and no local lesion that would account for the loss of blood at the month, and where the hæmorrhage has already been controlled by appropriate remedies, it will be found to be almost a specific.

In its mode of operation it seems to fill two very important physiological indications, one of which is to stimulate the digestion, the other to improve the quality of the blood. These indications are met by giving it in this form without a risk of bringing on a return of the hæmorrhage, and, although they are more strictly dietetic than pathogenetic, they are yet prac-

tical and useful. The difference between giving this remedy under the circumstances and prescribing *China* for a similar condition, is that china is much better suited for the control of the hæmorrhage during its active stage. Its well-known power to stimulate the uterine muscular contraction suggests the use of china in menorrhagia that depends upon subinvolution of the uterus; and its clinical reputation for curing the effects of a drain of the vital fluids furnishes valuable indications that are peculiar to itself. The range of use of the citrate of iron and strychnia in the post-hæmorrhagic anæmia of which this patient is a victim is equally pronounced and definite.

ANTE-MENSTRUAL HEADACHE.—*Case* 17955.—Mrs. ———, æt forty-two, has had four living children, and three miscarriages. Her youngest child is four years old. She has been feeling badly for about eighteen months, during which time she has suffered from a periodical headache which pre cedes the monthly period, and lasts four or five days, and stops as soon as the flow is established. The menses are regular, but for the eighteen months without exception their coming on has been preceded by the headache. She never has this headache at any other time. She took *Gelsemium* 3 four times a day.

At the next catamenial return she had almost no trouble with the head. At the second period the headache had disappeared, and she felt better in every way.

August 3.—She continued to take the gelsemium less frequently, and now has escaped the headache for four successive months.

I can see no reason why we should not recognize both ante- and post-menstrual headaches. The former is the more frequent of the two, and the more difficult of cure. It often gives the key to the menstrual complication, and suggests a menstrual congestion or an obstruction to the ready exit of the flow. It is a self-limited affair, and if remedies are not sufficient to prevent its recurrence we must look to the possibility of a uterine flexion, the corkage of the internal os or of the canal of the cervix by some foreign growth, or by a spasm of the circular fibres of the neck of the womb. In some cases it manifestly depends upon subacute ovaritis, and is therefore a reflex neurosis.

Of all the remedies that I have prescribed for the relief of this form of headache none of them have been so efficacious as gelsemium when given in the second or third decimal dilution. It seems to be adapted to very nervous subjects in whom the prodroma of menstruation, whatever they may be, are very much exaggerated. In many of these cases the suffering at the month is disproportionate to the local lesion, and the headache especially is a chief source of complaint. It is properly and chiefly congestive, but it is also neuralgic and sometimes hysterical.

In the treatment of this, as of other periodical affections, you should not fail to remember that in consequence of your remedies its type may be changed without the cure having been effected. The same thing may happen as when the paroxysm of a quotidian intermittent is changed to a tertian or a quartan ague. In either case we could not rightfully claim a cure, for while the old mischief recurs at all the trouble is not eradicated. I have seen this result from Belladonna, Ignatia and some other remedies, when they have been given for the relief of an ante-menstrual headache. They have seemed sufficient to modify the condition and to lessen the suffering, and even to change the period of its recurrence, but not to intercept it altogether. Indeed there is an element of periodicity in the clinical effect of gelsemium which is possessed by very few of our remedies.

Miscellaneous Items.

The twenty-eighth annual session of the Hahnemann Medical College and Hospital, of Chicago, will open on the evening of September 20, with an introductory lecture by Prof. Fellows.——Our enterprising friends in St. Paul, Minn., have opened a Homœopathic Hospital and Dispensary.——In opening a book review the *Health Record* says: "No one can fail to read this book without profit."——Dr. J. P. Cobb has been elected Secretary of the Clinical Society.——Dr. O. Leseure, having returned from Europe, has left Danville, Ill., for Detroit, where he becomes a partner of Dr. R. C. Olin.——Prof. Hall is at home again, and Prof. Bailey sails from Liverpool on the 20th of this month.——THE CLINIQUE has had a call from Mrs. Dr. Levanway, who was the first lady physician in Chicago, having begun practice here in the spring of 1853. ——A Colorado doctor says there is money in his coughers. ——The sixth edition of Ludlam's "Diseases of Women" will be out by October 1.——The Southern Homœopathic Association will hold its fourth annual meeting in New Orleans, December 14–16.——Dr. H. E. Reed will have charge of the Children's Clinic, in the Hahnemann Hospital, during the coming winter.——Dr. R. Ludlam, Jr., has returned home after a year's study abroad; and Dr. W. A. Dunn, of Wabash, Ind., has also returned from Europe.——The Autobiography of Prof. S. D. Gross, edited, in two volumes, by his sons, is the most readable work of the season.——The old Hahnemann College building is undergoing repairs, preparatory to the winter session.——Dr. F. C. Stewart has located in Peru, Ind.——Prof. Laning's contributions to THE CLINIQUE, one of which will be found in our current issue, are attracting deserved attention.——Prof. King succeeds to the Skin and Venereal Clinic in the hospital.